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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

**Washington, D.C. 20554**

Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996

CC Docket No. 98-146

**on August 7, 1998 Notice of Inquiry**

September 14, 1998

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## **I. GENERAL COMMENTS**

The American Library Association (ALA) respectfully submits its comments on the above referenced proceeding regarding the Federal Communications Commission's (FCC's or Commission's) Inquiry concerning the deployment of Advanced Telecommunications Capability to all Americans in a reasonable and timely fashion, and possible steps to accelerate such deployment pursuant to Section 706 of the Telecommunications Act of 1996. The ALA, founded in 1876, is the oldest and largest library association in the world. Its concerns span all types of libraries: state, public, school, academic, and special libraries. With a membership of more than 57,000 librarians, library trustees, library educators, friends of libraries and other interested persons from every state, ALA is the chief advocate for the people of the United States in their search for the highest quality of library and information services.

The primary mission of libraries, in this electronic age, is to provide the American public with access to the full panoply of electronic information resources available either commercially or in the public domain. Libraries need access to affordable telecommunications services that support this mission. Libraries serve this mission by providing access to global electronic resources such as the Internet's World Wide Web (WWW), by creating and offering their own public electronic information services, and by developing community information infrastructures.

The ALA does not intend to provide technical expertise in the context of this Notice of Inquiry. Instead, ALA will provide insights and estimates regarding the needs of libraries both now and in the future and discuss some of the issues within the context of

Universal Service that may be relevant to improving access to advanced telecommunications. To that end, ALA submits that the telecommunications needs of libraries today are very high and will continue to grow. Further, in underseved communities, libraries may have substantially higher needs than other consumers. Finally, ALA believes the Universal Service program that supports libraries in their mission is an important vehicle to disseminating advanced technologies throughout the United States and that any policy on access to advanced services should take into account both government and private initiatives that are rapidly moving ahead our understanding of the capabilities of the Internet and the services that will be offered on it.

## **II. LIBRARIES AS INSTRUMENTS OF UNIVERSAL SERVICE**

Before addressing the Commission's specific questions, ALA believes it is important to define the role libraries play in providing universal service. Libraries are the institutional providers of public access to all information within the public domain. To adequately meet the public policy goal of providing everyone, regardless of their geographic location, socio-economic status, age or physical ability, access to the vast resources of the information infrastructure, public institutions, such as libraries, must be recognized as playing a vital role in providing that access.

Libraries act as digital gateways to national and international resources on the information superhighway, act as digital providers of local community, government and cultural information and they are critical community resources in providing access to sophisticated telecommunications services to the local community. In a study of Pennsylvania libraries, over one-third, 34.5% of library users had no other access to the

Internet, other than at the library.<sup>1</sup> To fulfill these roles, libraries require a range of switched broadband, high-speed, interactive telecommunications services that allow libraries to support users both on site and remotely.

Further, according to a 1992 Gallup poll cited in the 1994 National Research Council report Realizing the Information Future: The Internet and Beyond, the general public itself has identified the library as a key provider of information. Participants listed the library as a “very important” information disseminator in the following ways: community information center (63%); independent learning center (83%) and reference library to community businesses (54%) among other roles. In a more recent June 1998 Gallup poll, 90% of respondents said they expected libraries to be needed in the future, despite the information available via computer. Almost 30% of respondents said they had used the computer at the library. Among those who had used the public library by phone or computer, 60% consulted a librarian, 48% checked the library’s computerized catalog, and 26% used other resources on the library’s Web page.

An example of how libraries can provide global access locally to their patrons is the work performed by the Online Computer Library Center (OCLC), a not-for-profit computer service and research organization whose network and services link more than 27,000 libraries in 64 countries and territories. OCLC services help libraries locate, acquire, catalog, access and lend library materials. Through OCLC, patrons have access to more than 70 databases through a single access point. These databases provide access

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<sup>1</sup> John C. Bertot & Charles R. McClure, *Impacts of Public Access to the Internet through Pennsylvania Public Libraries*, INFORMATION TECHNOLOGY AND LIBRARIES, Dec. 1997 at 158-159.

to books, maps, sound recordings, computer files and other information for lending and borrowing ( [http:// www.oclc.org/oclc/promo/4968ocgl/4968.htm](http://www.oclc.org/oclc/promo/4968ocgl/4968.htm)). OCLC's advantages are limited only by the transmission capabilities of individual libraries that access its bibliographic holdings and the member fees that OCLC imposes.

Many state library agencies also help provide access to a wider range of resources. Examples of projects supported by state library agencies include Sailor, Maryland's statewide public network, connecting libraries, schools and government agencies to the global Internet (<http://sailor.lib.md.us/>); OPLIN, the Ohio Public Library Information Network (<http://www.oplin.lib.oh.us/index.html>); Pioneer, Utah's online library involving the combined efforts of public libraries, higher and public education, the Utah Education Network, and the Utah state government; and ACLIN, the Access Colorado Library and Information Network, a statewide network providing access to over 230 library catalogs and information resources on business, health, government, the arts, and more (<http://www.aclin.org/>). These types of networks, which provide critical support and resources for public, academic, and school libraries require access to advanced telecommunications resources.

### **III. LIBRARIES' CURRENT CAPABILITIES:**

While Internet access is not the only telecommunications issue for libraries, it provides a useful example of what libraries' current capabilities are. In the 1998 National Survey of Public Library Outlet Internet Connectivity that will be published in October, 73% of those libraries surveyed provided their patrons Internet access in some form. In addition, 64% had a maximum connection speed of 56kbp or lower.

In other words, nearly 2/3 of public libraries are connecting at speeds no greater than that of analog modems currently available to home users. Yet, it takes approximately half a minute to download a simple two megabit image and nearly five minutes to download a complex 16 megabit image at this speed.<sup>2</sup> Furthermore libraries must be able to provide more than just single user access to an increasingly multimedia, bandwidth intensive environment and to an increasingly sophisticated clientele. In addition, more libraries are also acting as servers of multimedia information. In 1996 only 1.2% of all public libraries had their own Web sites. By 1997 this figure had increased to 10% and it is reasonable to expect this number will continue to grow.<sup>3</sup>

In the 1997 survey, respondents were asked to rank the most important factors inhibiting Internet access to their patrons. The respondents cited telecommunications fees as the number one difficulty they faced with availability of Federal/state funds, access to appropriate hardware, digital copyright fees and in-house expertise being additional factors following in that order.

In Florida the expected connectivity successes are even greater. By October 1998, 96% of all public library outlets will be connected to the Internet. The bandwidth standard will be T-1 access. However, this success is dependent on the Commission's Universal Service program for schools and libraries. If the program funds are not available to discount the monthly recurring costs, many of those connections will be unplugged within a year.

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<sup>2</sup> Mark Robichaux, *Cable Modems Are Tested and Found to Be Addictive*, WALL ST. J., Dec. 27, 1995 at 13.

<sup>3</sup> AMERICAN LIBRARY ASSOCIATION, THE 1997 NATIONAL SURVEY OF U.S. PUBLIC LIBRARIES AND THE INTERNET. SUMMARY RESULTS. (Nov. 1997).

#### **IV. ARE LIBRARIES' NEEDS FOR ADVANCED TELECOMMUNICATIONS CAPABILITY (QUANTITY AND QUALITY) LIKELY TO BE THE SAME AS THOSE OF THE AREAS SURROUNDING THEM?**

In major metropolitan areas, the quantity and quality of advanced telecommunications capabilities is expected to be very good, particularly for libraries located in areas that have high concentrations of advanced services, such as high density commercial areas. In these cases, affordability, not availability becomes the crucial factor inhibiting technological advancement at a library. Libraries in these communities face the same struggles other large telecommunications service users face for connectivity, but with a public sector budget. However, in metropolitan areas where branch libraries exist, but there is no other business case for providing advanced services, these libraries, and by extension their communities, may be deprived of access to advanced telecommunications and information services. For example, in ALA's 1998 National Survey of Public Library Outlet Internet Connectivity to be published in October, it was found that only 57.6% of public libraries in urban areas had access speeds of greater than 56 kbps. In suburban areas, this figure is only 40.9%. This may suggest that high speed bandwidth is not affordable or available to many urban and suburban libraries.

In rural areas, however, libraries may require more capacity than others in their communities as they try to fulfill their role as community information center, independent learning center and reference library to community businesses. In these instances, the hurdles may include not only affordability, but availability of broad-band access to telecommunications services. In small, rural communities in the West, libraries have been told that a service is simply not available in that community because a

telecommunications provider cannot make a “business case” to justify deployment of the technology, such as T-1 service. In fact the 1998 survey referenced above shows that only 22.8% of libraries in rural areas have access speeds of greater than 56 kbps.

New technology deployment naturally begins in the larger metropolitan areas for an obvious reason - concentrated demand. Depending on a new technology’s success, it may reach more rural areas quickly or slowly.

## **V. WILL THE SHORTAGE BE MADE UP BY OTHER GOVERNMENT PROGRAMS OR BY SPECIAL PRIVATE INITIATIVES?**

Typically, libraries can, with extensive effort, find ways to resolve one-time purchases for equipment or training issues. However, access shortages cannot be completely resolved by government programs or by special private initiatives because recurring costs remain the highest cost to libraries. Recurring costs are least likely to be addressed in most government or private grant programs.

The June 1995 National Commission on Libraries and Information Science report *Internet Costs Models for Public Libraries*, pp. 26-27 states that for a public library providing WWW services and supporting multiple, multimedia-capable workstations with Internet access at T-1 speeds, communications hardware and fees represent approximately 8% of one-time costs and about 29% of a library’s ongoing costs. Relief is needed for these recurring costs. While there are other government programs supporting technology, most do not provide ongoing support. Usually these programs provide funding for limited time periods or for cutting edge demonstrations, not to support the ongoing activities of the average library serving its community.

In Florida as in many other states, the state has taken on the responsibility of creating



a high-speed network that can accommodate up to T3 speeds. It invests over \$4.25 million on an annual basis in this infrastructure. However, that state network is not useful to the library that cannot reach it or sustain such capacity locally. Sustaining the recurring cost of the local loop for a public library through Universal Service discounts is necessary to make this high speed service relevant at the local level.

The primary Federal funding source for libraries' technology is the Library Services and Technology Act (LSTA). The Library Services and Technology Act is Subtitle B of the Museum and Library Services Act, which was added as Title VII of H.R. 3610, the Department of Defense Appropriations Bill for FY97. The conference report (H. Rept. 104-863) on H.R. 3610 was enlarged to serve as the end-of-session vehicle for an omnibus appropriations measure funding several federal agencies to which other provisions such as the new LSTA were added. H.R. 3610 was signed into law on September 30, 1996, and is now P.L. 104-208. In the U.S. Code, the Museum and Library Services Act becomes title II of the Museum Services Act (20 U.S.C. 961 et seq.).

The purpose of the Library Services and Technology Act is as follows (section 212):

- (1) to consolidate Federal library service programs;
  - (2) to stimulate excellence and promote access to learning and information resources in all types of libraries for individuals of all ages;
  - (3) to promote library services that provide all users access to information through State, regional, national and international electronic networks;
  - (4) to provide linkages among and between libraries; and
- to promote targeted library services to people of diverse geographic, cultural, and socioeconomic backgrounds, to individuals with disabilities, and to people with limited functional literacy or information skills.

More specifically, the majority of funds under LSCA are allotted to State library administrative agencies, to be used directly or through subgrants or cooperative agreements, for (subsection 231(a)):

- (1) (A) establishing or enhancing electronic linkages among or between libraries;
- (B) electronically linking libraries with educational, social, or information services;
- (C) assisting libraries in accessing information through electronic networks;
- (D) encouraging libraries in different areas, and encouraging different types of libraries, to establish consortia and share resources, or
- (E) paying costs for libraries to acquire or share computer systems and telecommunications technologies; and
- (2) targeting library and information services to persons having difficulty using a library and to underserved urban and rural communities, including children (from birth through age 17) from families with incomes below the poverty line (as defined by the Office of Management and Budget and revised annually in accordance with section 673(2) of the Community Services Block Grant Act (42 U.S.C. 9902(2)) applicable to a family of the size involved.

It is important to note that the purposes for which LSTA funds may be used are quite broad and encompass many aspects of technology and telecommunications support, many of which are **not** covered by the universal service program established under Section 254 of the Telecommunications Act of 1996. For example LSTA funds can and have been used for the purchase and upgrading of bookmobiles, the purchase of electronic content and databases, the purchase of computing equipment, the provision of training, and the establishment of programs to serve children. Last year, LSTA was funded at \$146 million.

LSTA provides an important source of funding for resources not covered by Section 254 of the Telecommunications Act which cover only one aspect of what ALA calls the "4 Cs" -- Connectivity, Computers, Content, and Competencies. LSTA and its

predecessor programs complement the Commission's task by helping libraries to aggregate their Connectivity purchasing power, but also by providing stimulus funds for Computers, Content, and Competencies.

There has been some competitive benefit realized from the Telecommunications Act of 1996, which suggests that the Commission's role in expanding competition among and between telecommunications providers can improve the situation for libraries as well. In Florida, the state recently renegotiated state pricing with its telecommunications provider. In this instance, the circuit prices had dropped significantly. For those areas that are able to experience competition, this could be a precursor to other successes for telecommunications users.

## **VI. RELATIONSHIP OF SECTION 706 TO SECTION 254**

ALA believes that the Commission's Universal Service Program for schools and libraries is the first comprehensive effort to provide support to libraries for their recurring telecommunications costs. While not one library has seen a dime of this support to date, there is great hope within the library community that many of the problems mentioned above will be resolved through this effort. Thousands of libraries have committed to hundreds of thousands of hours to meet the program's requirements because they believe this program will help them meet their technology goals and the demands of their communities.

Despite its promise, however, the Universal Service program is not a panacea for libraries. First, while the program addresses recurring costs associated with the primary inhibitor to libraries' technological development, the program is an annual program that

cannot guarantee a specific level of support each year, nor guarantee ongoing support beyond one year. In the first cycle alone the Schools and Libraries Corporation estimated that the demand for services in the first 12 months of the program was \$2.02 billion (May 11, 1998 letter from the SLC to the Commission) while the support provided by the Commission is limited to approximately \$1.67 billion for that same time period (FCC Reforms Universal Service Support Mechanism for Schools and Libraries see CC Docket No. 96-45, FCC 98-120). Assuming increased participation by libraries and schools and increased high-speed capabilities, demand is sure to exceed the \$2.25 billion ceiling established for the program in the next few years. This potentially means that future years will yield smaller discounts for libraries and schools or fewer participants.

Secondly, the Universal Service program does not necessarily promote the most cost effective solutions for libraries. While the Schools and Libraries Corporation has bent over backwards to try and include as many modalities as possible, the Commission's interpretation of a telecommunications service, which requires an ongoing lease-type relationship with a service vendor, inhibits the use of more recently developed technologies, such as some types of wireless service, that provide the same capabilities, but do not require ongoing relationships to accomplish them.

Thirdly, the Universal Service program does not improve the likelihood that a service previously unavailable in a rural area or other underserved area will suddenly become available. For a service that is not available in an area because a "business case" cannot be made, the Universal Service program will not ameliorate the service deficit. Other efforts must be made by the FCC to assure deployment of advanced telecommunications

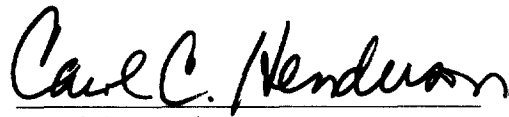
services in these areas.

Finally, any policy on access to advanced services should take into account both government and private initiatives that are rapidly moving ahead our understanding of the capabilities of the Internet and the services that will be offered on it. Federal programs such as Next Generation Internet, Digital Libraries, and many others are pushing high-end applications that potentially will have broad public applicability in education, health care, government services, and e-commerce. Private initiatives such as Internet 2 are developing advanced high-speed infrastructures for higher education and exploring new educational, library, and research applications. Libraries, schools, and similar community access points will become "time machines," as it were, allowing public access to important leading edge services long before they will be technically or economically feasible for delivery to the home. Indeed, libraries are likely to be keys to the broader deployment of such advanced digital public services, serving not only as early adopters, but as testbeds for exploring the benefits and issues surrounding the use of such applications.

## **VII. CONCLUSION**

The ALA appreciates the opportunity to comment in this inquiry. We believe that the Commission has played a significant role in improving libraries' opportunities to service their patrons through better technological opportunities. We look forward to working with the Commission on its efforts to further refine and define its role and the technologies it regulates to assure that all communities throughout American have access to the services they need.

Respectfully Submitted,

A handwritten signature in black ink that reads "Carol C. Henderson". The signature is written in a cursive style with a horizontal line underneath the name.

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